**SBA-3 ABDUL JAVID 210932**

1. Create Database project\_movie\_data and deploy table data according to ER diagram.

2. Create 9 tables which are presented in ER model and load the data with their foreign key and primary key values.

**Creating Databases and Tables**

* create database project\_movie\_data;
* use project\_movie\_data;
* create table actor ( act\_id int not null, act\_fname char(20), act\_lname char(20), act\_gender char(1), primary key (act\_id));
* create table director ( dir\_id int not null, dir\_fname char(20), dir\_lname char(20), primary key (dir\_id));
* create table genres ( gen\_id int not null, gen\_title char(20), primary key(gen\_id));
* create table reviewer ( rev\_id int not null, rev\_name char(30), primary key(rev\_id));
* create table movie ( mov\_id int not null, mov\_title char(50), mov\_year int, mov\_time integer, mov\_lang char(50), mov\_dt\_rel date, mov\_rel\_country char(5),primary key(mov\_id));
* create table movie\_cast ( act\_id int not null, mov\_id int not null, role char(30), foreign key(act\_id) references actor(act\_id), foreign key(mov\_id) references movie(mov\_id));
* create table movie\_direction (dir\_id int not null, mov\_id int not null, foreign key(dir\_id) references director(dir\_id), foreign key(mov\_id) references movie(mov\_id));
* create table rating ( mov\_id int not null, rev\_id int not null, rev\_stars decimal(8,2), num\_o\_ratings int, foreign key(mov\_id) references movie(mov\_id), foreign key(rev\_id) references reviewer(rev\_id));
* create table movie\_genres ( mov\_id int not null, gen\_id int not null, foreign key(mov\_id) references movie(mov\_id), foreign key(gen\_id) references genres(gen\_id));

**Query for inserting on table actor:**

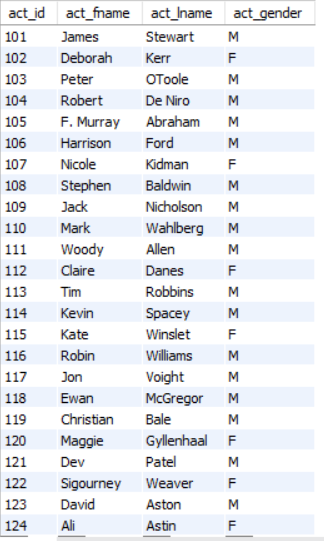
insert into actor (act\_id, act\_fname, act\_lname, act\_gender) values (101, 'James', 'Stewart', 'M'),(102, 'Deborah', 'Kerr', 'F'),(103, 'Peter', 'OToole', 'M'),(104, 'Robert', 'De Niro', 'M'),

(105, 'F. Murray', 'Abraham', 'M'),(106, 'Harrison', 'Ford', 'M'),(107, 'Nicole', 'Kidman', 'F'),

(108, 'Stephen', 'Baldwin', 'M'),(109, 'Jack', 'Nicholson', 'M'),(110, 'Mark', 'Wahlberg', 'M'),

(111, 'Woody', 'Allen', 'M'),(112, 'Claire', 'Danes', 'F'),(113, 'Tim', 'Robbins', 'M'),(114, 'Kevin', 'Spacey', 'M'),(115, 'Kate', 'Winslet', 'F'),(116, 'Robin', 'Williams', 'M'),(117, 'Jon', 'Voight', 'M'),

(118, 'Ewan', 'McGregor', 'M'),(119, 'Christian', 'Bale', 'M'),(120, 'Maggie', 'Gyllenhaa', 'F'),(121, 'Dev', 'Patel', 'M'),(122, 'Sigourney', 'Weaver', 'F'),(123, 'David', 'Aston', 'M'),(124, 'Ali', 'Astin', 'F');



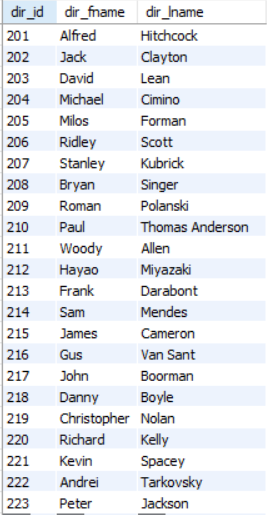
**Query for inserting on table director:**

insert into director (dir\_id, dir\_fname, dir\_lname) values (201, 'Alfred', 'Hitchcock'),(202, 'Jack', 'Clayton'),(203, 'David', 'Lean'),(204, 'Michael', 'Cimino'),(205, 'Milos', 'Forman'),(206, 'Ridley', 'Scott'),(207, 'Stanley', 'Kubrick'),(208, 'Bryan', 'Singer'),(209, 'Roman', 'Polanski'),(210, 'Paul', 'Thomas Anderson'),(211, 'Woody', 'Allen'),(212, 'Hayao', 'Miyazaki'),(213, 'Frank', 'Darabont'),

(214, 'Sam', 'Mendes'),(215, 'James', 'Cameron'),(216, 'Gus', 'Van Sant'),(217, 'John', 'Boorman'),

(218, 'Danny', 'Boyle'),(219, 'Christopher', 'Nolan'),(220, 'Richard', 'Kelly'),(221, 'Kevin', 'Spacey'),

(222, 'Andrei', 'Tarkovsky'),(223, 'Peter', 'Jackson');

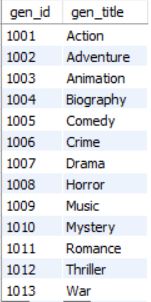


**Query for inserting on table genres:**

insert into genres (gen\_id, gen\_title) values (1001, 'Action'),(1002, 'Adventure'),

(1003, 'Animation'),(1004, 'Biography'),(1005, 'Comedy'),(1006, 'Crime'),(1007, 'Drama'),

(1008, 'Horror'),(1009, 'Music'),(1010, 'Mystery'),(1011, 'Romance'),(1012, 'Thriller'),(1013, 'War');



**Query for inserting on table movie:**

insert into movie (mov\_id, mov\_title, mov\_year, mov\_time, mov\_lang, mov\_dt\_rel, mov\_rel\_country) values (901, 'Vertigo', 1958, 128, 'English', '1958-08-24', 'UK'),

(902, 'The Innocents', 1961, 100, 'English', '1962-02-19', 'SW'),(903, 'Lawrence of Arabia', 1962, 216, 'English', '1962-12-11', 'UK'),(904, 'The Deer Hunter', 1978, 183, 'English ', '1979-03-08', 'UK'),

(905, 'Amadeus', 1984, 160, 'English', '1985-01-07', 'UK'),(906, 'Blade Runner', 1982, 117, ' English', '1982-09-09', 'UK'),(907, 'Eyes Wide Shut', 1999, 159, 'English', null, 'UK'),

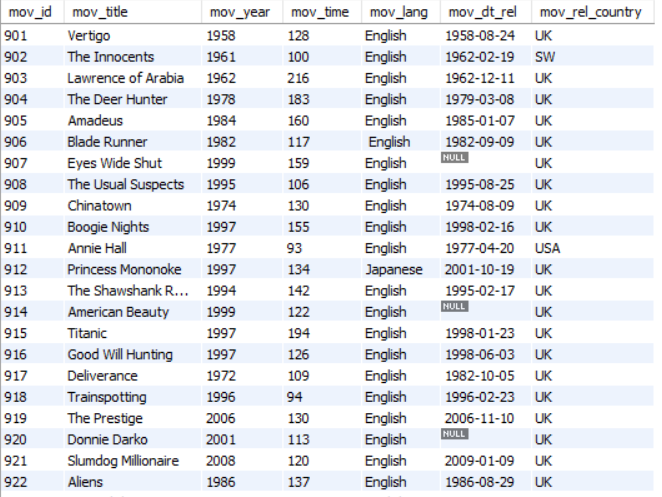
(908, 'The Usual Suspects', 1995, 106, 'English', '1995-08-25', 'UK'),(909, 'Chinatown', 1974, 130, 'English', '1974-08-09', 'UK'),(910, 'Boogie Nights', 1997, 155, 'English', '1998-02-16', 'UK'),

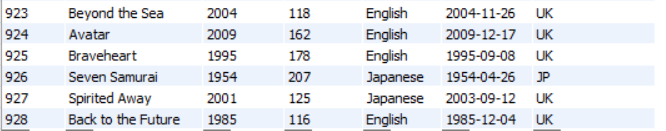
(911, 'Annie Hall', 1977, 93, 'English', '1977-04-20', 'USA'),(912, 'Princess Mononoke', 1997, 134, 'Japanese', '2001-10-19', 'UK'),(913, 'The Shawshank Redemption', 1994, 142, 'English', '1995-02-17', 'UK'),(914, 'American Beauty', 1999, 122, 'English', null, 'UK'),(915, 'Titanic', 1997, 194, 'English', '1998-01-23', 'UK'),(916, 'Good Will Hunting', 1997, 126, 'English', '1998-06-03', 'UK'),

(917, 'Deliverance', 1972, 109, 'English', '1982-10-05', 'UK'),(918, 'Trainspotting', 1996, 94, 'English', '1996-02-23', 'UK'),(919, 'The Prestige', 2006, 130, 'English', '2006-11-10', 'UK'),

(920, 'Donnie Darko', 2001, 113, 'English', null, 'UK'),(921, 'Slumdog Millionaire', 2008, 120, 'English', '2009-01-09', 'UK'),(922, 'Aliens', 1986, 137, 'English', '1986-08-29', 'UK'),(923, 'Beyond the Sea', 2004, 118, 'English', '2004-11-26', 'UK'),(924, 'Avatar', 2009, 162, 'English', '2009-12-17', 'UK'),(926, 'Seven Samurai', 1954, 207, 'Japanese', '1954-04-26', 'JP'),

(927, 'Spirited Away', 2001, 125, 'Japanese', '2003-09-12', 'UK'),(928, 'Back to the Future', 1985, 116, 'English', '1985-12-04', 'UK'),(925, 'Braveheart', 1995, 178, 'English ', '1995-09-08', 'UK');

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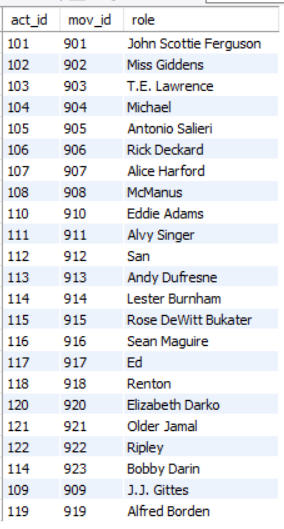
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**Query for inserting on table movie\_cast:**

INSERT INTO movie\_cast (act\_id, mov\_id, role) VALUES (101, 901, 'John Scottie Ferguson'),

(102, 902, 'Miss Giddens'),(103, 903, 'T.E. Lawrence'),(104, 904, 'Michael'),(105, 905, 'Antonio Salieri'),(106, 906, 'Rick Deckard'),(107, 907, 'Alice Harford'),(108, 908, 'McManus'),(110, 910, 'Eddie Adams'),(111, 911, 'Alvy Singer'),(112, 912, 'San'),(113, 913, 'Andy Dufresne'),(114, 914, 'Lester Burnham'),(115, 915, 'Rose DeWitt Bukater'),(116, 916, 'Sean Maguire'),(117, 917, 'Ed'),

(118, 918, 'Renton'),(120, 920, 'Elizabeth Darko'),(121, 921, 'Older Jamal'),(122, 922, 'Ripley'),(114, 923, 'Bobby Darin'),(109, 909, 'J.J. Gittes'),(119, 919, 'Alfred Borden');



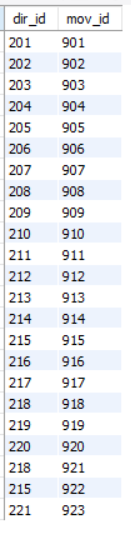
**Query for inserting on table movie\_direction:**

INSERT INTO movie\_direction (dir\_id, mov\_id) VALUES (201, 901),(202, 902),(203, 903),

(204, 904),(205, 905),(206, 906),(207, 907),(208, 908),(209, 909),(210, 910),(211, 911),

(212, 912),(213, 913),(214, 914),(215, 915),(216, 916),(217, 917),(218, 918),(219, 919),(220, 920),

(218, 921),(215, 922),(221, 923);



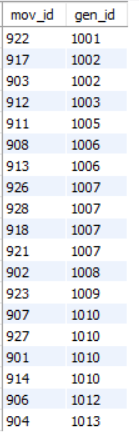
**Query for inserting on table movie\_genres:**

INSERT INTO movie\_genres (mov\_id, gen\_id) VALUES (922, 1001),(917, 1002),(903, 1002),

(912, 1003),(911, 1005),(908, 1006),(913, 1006),(926, 1007),(928, 1007),(918, 1007),

(921, 1007),(902, 1008),(923, 1009),(907, 1010),(927, 1010),(901, 1010),(914, 1010),

(906, 1012),(904, 1013);



**Query for inserting on table reviewer:**

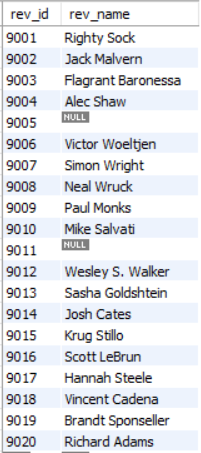
insert into reviewer (rev\_id, rev\_name) values (9001, 'Righty Sock'),(9002, 'Jack Malvern'),

(9003, 'Flagrant Baronessa'),(9004, 'Alec Shaw'),(9005,null),(9006, 'Victor Woeltjen'),(9007, 'Simon Wright'),(9008, 'Neal Wruck'),(9009, 'Paul Monks'),(9010, 'Mike Salvati'),(9011,null),

(9012, 'Wesley S. Walker'),(9013, 'Sasha Goldshtein'),(9014, 'Josh Cates'),(9015, 'Krug Stillo'),

(9016, 'Scott LeBrun'),(9017, 'Hannah Steele'),(9018, 'Vincent Cadena'),

(9019, 'Brandt Sponseller'),(9020, 'Richard Adams');



**Query for inserting on table rating:**

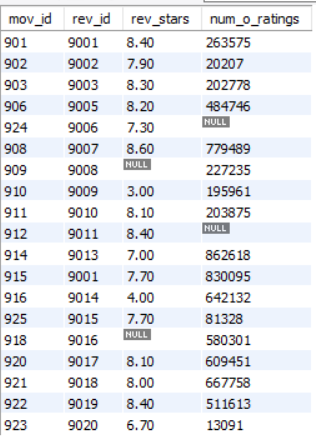
INSERT INTO rating (mov\_id, rev\_id, rev\_stars, num\_o\_ratings) VALUES (901, 9001, 8.4, 263575),(902, 9002, 7.9, 20207),

(903, 9003, 8.3, 202778),(906, 9005, 8.2, 484746),(924, 9006, 7.3, null),(908, 9007, 8.6, 779489),(909, 9008, null, 227235),

(910, 9009, 3, 195961),(911, 9010, 8.1, 203875),(912, 9011, 8.4, null),(914, 9013, 7, 862618),(915, 9001, 7.7, 830095),

(916, 9014, 4, 642132),(925, 9015, 7.7, 81328),(918, 9016, null, 580301),(920, 9017, 8.1, 609451),(921, 9018, 8, 667758),

(922, 9019, 8.4, 511613),(923, 9020, 6.7, 13091);

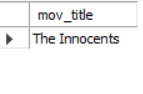


3. Write a query in SQL to list the Horror movies?

SELECT mov\_title

FROM movie WHERE mov\_id=(SELECT mov\_id FROM movie\_genres

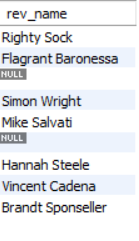
WHERE gen\_id in (SELECT gen\_id FROM genres WHERE gen\_title='Horror'));



4. Write a query in SQL to find the name of all reviewers who have rated 8 or more stars?

select rev\_name from reviewer rv INNER JOIN rating rt on rv.rev\_id = rt.rev\_id

where rt.rev\_stars >= 8.00;

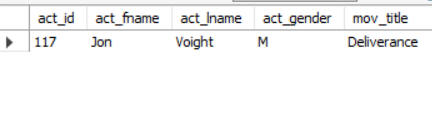


5. Write a query in SQL to list all the information of the actors who played a role in the movie ‘Deliverance’

select a.act\_id,a.act\_fname,a.act\_lname,a.act\_gender,m.mov\_title

from actor a INNER JOIN movie\_cast mc on a.act\_id = mc.act\_id

INNER JOIN movie m on m.mov\_id = mc.mov\_id where m.mov\_title = 'Deliverance';

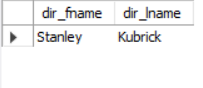


6. Write a query in SQL to find the name of the director (first and last names) who directed a movie that casted a role for ‘Eyes Wide Shut’. (using subquery)

select dir\_fname, dir\_lname from director

where dir\_id in ( select dir\_id from movie\_direction where mov\_id in

(select mov\_id from movie m where mov\_title = 'Eyes Wide Shut'));



7. Write a query in SQL to find the movie title, year, date of release, director and actor for those movies which reviewer is ‘Neal Wruck’

select mov\_title, mov\_year, mov\_dt\_rel, dir\_fname, dir\_lname, act\_fname, act\_lname

from movie m, director d, actor a, movie\_direction md, rating rt, reviewer rv, movie\_cast mc

where md.dir\_id = d.dir\_id

and mc.act\_id = a.act\_id

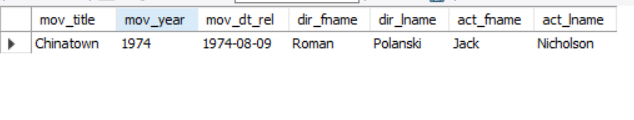
and m.mov\_id = md.mov\_id

and m.mov\_id = mc.mov\_id

and m.mov\_id = rt.mov\_id

and rt.rev\_id = rv.rev\_id

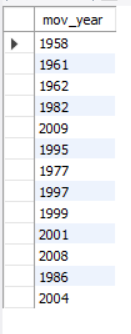
and rv.rev\_name = 'Neal Wruck';



8. Write a query in SQL to find all the years which produced at least one movie and that received a rating of more than 4 stars.

select DISTINCT mov\_year

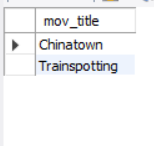
from movie where mov\_id in (select mov\_id from rating where rev\_stars>4.00);



9. Write a query in SQL to find the name of all movies who have rated their ratings with a NULL value

select mov\_title from movie

where mov\_id in (select mov\_id from rating where rev\_stars is null);



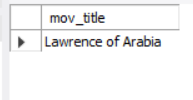
10. Write a query in SQL to find the name of movies who were directed by ‘David’

select mov\_title

from movie m inner join movie\_direction md on m.mov\_id = md.mov\_id

inner join director d on md.dir\_id = d.dir\_id

where dir\_lname = 'david' or dir\_fname = 'david';



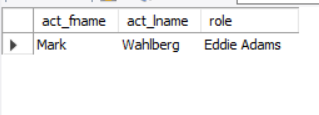
11. Write a query in SQL to list the first and last names of all the actors who were cast in the movie ‘Boogie Nights’, and the roles they played in that production.

select a.act\_fname, a.act\_lname ,mc.role

from actor a inner join movie\_cast mc on a.act\_id = mc.act\_id

inner join movie m on mc.mov\_id = m.mov\_id

where mov\_title = 'Boogie Nights';



12. Find the name of the actor who have worked in more than one movie

select mov\_title from movie

where mov\_id in (select mov\_id from movie\_cast

where act\_id in (select act\_id from actor

where act\_id IN (select act\_id from movie\_cast group by act\_id having COUNT(act\_id)>1)));

